

ABSTRACT OF THE DISCLOSURE

There is disclosed a magnetoresistive film in which increase of a coupling field accompanying thickness reduction of a middle layer is inhibited. The magnetoresistive film is a multilayered film including a pinned layer 3 having magnetization whose direction is fixed, a nonmagnetic middle layer 4 formed on the pinned layer, and a free layer 5 formed on the middle layer and provided with magnetization whose direction changes in accordance with an external magnetic field, the magnetoresistive film indicates a magnitude of resistance in accordance with an angle formed by the magnetization direction of the pinned layer and the magnetization direction of the free layer, and a copper oxide layer 7 of an oxide including a copper element is formed directly on the free layer, or on the free layer via an oxide layer 6 of a material fabricated by oxidizing a material constituting the free layer.